UNITED STATES DISTRICT COURTS OF NEW YORK



THE COUNTY OF BEAVER, on behalf of itself and all others similarly situated,

Plaintiff,

VS.

BANK OF AMERICA CORPORATION; BARCLAYS BANK PLC; BNP PARIBAS SA; CITIGROUP INC.; CREDIT SUISSE AG, NEW YORK BRANCH; DEUTSCHE BANK AG; GOLDMAN, SACHS & CO.; HSBC BANK PLC; ICAP PLC; JPMORGAN CHASE & CO.; NOMURA SECURITIES INTERNATIONAL, INC.; ROYAL BANK OF SCOTLAND PLC; UBS AG; and WELLS FARGO BANK, N.A.,

Defendants.

CLASS ACTION COMPLAINT

JURY TRIAL DEMANDED



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Plaintiff, the County of Beaver ("Beaver County" or "Plaintiff"), individually and on behalf of all persons and entities similarly situated, brings this antitrust class action for treble damages and injunctive relief and alleges as follows:

NATURE OF THE ACTION

- 1. While it may not be familiar to the average investor, the "ISDAfix" benchmark rate is one of the more important benchmarks in the U.S. financial system. ISDAfix is a key interest rate for a broad range of interest rate derivatives and other financial instruments. It impacts everything from plain vanilla interest rate swaps (an exchange of a floating interest rate for a fixed one) and swaptions (options on interest rate swaps) to more esoteric financial instruments such as swapnote futures, cash-settled swap futures, constant maturity swaps, "steepeners," "inverse floaters," and "snowballs," among others. ISDAfix rates are also used to price commercial real estate mortgages and various types of structured notes and bonds.
- 2. ISDAfix was designed to represent current fixed rates for interest rate swaps of various terms. Specifically, it is supposed to be an average mid-market swap rate for six major currencies at selected maturities. Throughout the Class Period (as defined below), ISDAfix for swap rates priced in U.S. dollars ("USD") was set every day between 11:00 and 11:15 a.m. Eastern Time. For USD swap rates, ISDAfix was administered by Defendant ICAP plc ("ICAP") and was based on the submissions of the Defendant Banks (defined herein).
- 3. Each day throughout the Class Period, ICAP was supposed to calculate and publish USD ISDAfix rates. Pursuant to a protocol established by the International Swaps and Derivatives Association ("ISDA") the creator of ISDAfix ICAP was supposed to set ISDAfix rates by taking a "reference rate," which was the average trading rate of interest rate swaps at 11:00 a.m. as calculated by ICAP, and then have each Defendant Bank either validate the

reference rate or else submit its own rate. ICAP would then adjust the reference rate based on the Defendant Banks' submissions and publish the ISDAfix benchmark rates for USD interest rate swaps of various terms.

- 4. The USD ISDAfix rates were supposed to reflect competitive forces, supply and demand in the interest rate derivatives market. The Defendant Banks are competitors in the interest rate derivatives market and were supposed to compete with each other for the best possible terms in transactions *and* for the business of their customers investors like Plaintiff Beaver County and the Class here. ISDAfix, which was based on averaging of real transaction data as calculated by ICAP, was intended to reflect competitive prices.
- 5. It turns out, however, that throughout the Class Period, the Defendant Banks and ICAP entered into a secret conspiracy to fix the ISDAfix rate at artificial levels. Instead of competing aggressively, the Defendant Banks colluded to avoid paying investors what they owed on interest rate derivatives. The Defendant Banks secretly conspired to avoid paying the true amounts owed when investors' ISDAfix-linked investments were in-the-money by jointly manipulating the ISDAfix rates used to determine the amounts due to investors. They enlisted Defendant ICAP in their scheme to ensure its success.
- 6. In particular, the Defendant Banks entered into an overarching agreement that, when any subset of banks faced particular exposure to the settlement of an ISDAfix-linked transaction on a certain day, the other banks and ICAP would help manipulate USD ISDAfix rates to a level that would help that subset of banks (while hurting their customers). The Defendant Banks communicated with each other through electronic chat rooms and other forms of private communication to determine when it was time to manipulate ISDAfix and how it should be manipulated to serve these ends.

- 7. Defendants conspired to manipulate ISDAfix in at least three ways. *First*, the Defendant Banks conspired to manipulate the fixed swap rate just before the period during which ISDAfix was set. They did this by executing a series of rapid-fire transactions through ICAP and submitting executable bids and offers to ICAP so-called "banging the close" to push the rates to a particular level. By executing a large volume of transactions and submitting executable bids and offers in a short period just before ICAP released its reference rate, Defendants manipulated the starting rate on which ISDAfix was based.
- 8. For its part, ICAP, which not only set the USD ISDAfix rates, but is also the largest interest rate derivatives broker in the business, agreed to publish prices for as many transactions as possible just before the benchmark-setting process begins. ICAP's brokers made millions of dollars in commissions from the Defendant Banks' business so much that ICAP's New Jersey office earned the name "Treasure Island" and ICAP maintained its good relationship with the Defendant Banks by facilitating "banging the close."
- 9. Economic analyses commissioned by Plaintiff confirm this manipulative strategy. Numerous days throughout the Class Period, as defined below, show highly anomalous, statistically significant upward or downward spikes just before the benchmark setting that, within minutes after the conclusion of the process, recover to pre-benchmark fixed rates. These price spikes, which are entirely consistent with the evidence of Defendants' conspiracy, can only be explained as the result of collusion among Defendants and ICAP.
- 10. **Second**, on numerous occasions throughout the Class Period, ICAP would agree with the Defendant Banks that it would delay the reporting of actual swap rates until **after** the conclusion of the ISDAfix setting process. By instructing ICAP to hold off on the processing of transactions until after the completion of the benchmark setting process, the Defendant Banks

manipulated the reference rate that ICAP would post at the beginning of the polling period. And if the manipulation on that day involved only a handful of banks interested in moving ISDAfix rates to a particular level, they could do so secure in the knowledge that all other banks would match the reference rate established by ICAP and would not do anything that might hamper their manipulation. Again, the economic analysis detailed herein confirms these collusive tactics.

- 11. *Third*, there were occasions when certain of the banks simply secured ICAP's agreement in advance to post a reference rate to other ISDAfix contributors that was not truly reflective of actual trades in the marketplace. Such an off-market reference rate would allow a group of banks to benefit by manipulating USD ISDAfix rates to a desired level, while not harming other members of the conspiracy.
- 12. The tell-tale evidence of Defendants' conspiracy is firmly established by the economic data. In particular, in order to make their conspiracy succeed, the Defendant Banks agreed with each other that they would not disturb the so-called "reference rate" posted by ICAP. As part of the ISDAfix process, ICAP would submit the reference rates to the Defendant Banks for them to affirm or submit another quote. Despite the fact that ISDA provided that these quotes should be a "function of [the bank's] own bid/offer spread," the Defendant Banks consistently submitted quotes that did not reflect their own bid/offer spreads or the transactions they were then executing. Instead, the Defendant Banks submitted *identical* quotes to ICAP, matching the reference rate posted by ICAP, even though they knew these rates were often offmarket and they were manipulating ISDAfix to artificial levels.
- 13. As a consequence of this agreement, since at least 2009 (and likely before), the Defendant Banks regularly submitted the same or virtually the same USD ISDAfix rate quotes *on almost every single day*, down to five decimal points. This resulted in the official ISDAfix

rate and the individual banks' contributions being identical to the ICAP reference rate 95% of the time for at least four years. ISDAfix rate quote submissions go to five decimal points – to a thousandth of a basis point. The odds against contributors unilaterally submitting over an extended period the exact same quotes down to the thousandth of a basis point, without colluding, are astronomical. Yet, this happened *almost every single day* between (at least) 2009 and December 2012. Just as conspicuously, this obvious coordination only stopped when the Defendant Banks learned that their benchmark-setting efforts were under investigation.

- 14. Defendants' manipulation of ISDAfix even if sometimes only by a few basis points impacted trillions of dollars of financial instruments. This effect can perhaps be best seen in instruments known as swaptions. In a swaption, instead of swapping interest rates on the date of the transaction, the parties negotiate an option to enter into an interest rate swap in the future. The market for swaptions is huge. The amount of notional derivatives underlying swaptions contracts outstanding as of July 26, 2013 totaled \$29.5 trillion, according to the Depository Trust & Clearing Corp.
- 15. Many swaptions are cash-settled, which means that the two parties to the swaption agree that instead of entering into the underlying swap, the seller of the swaption (the party selling the option to swap a floating rate for a fixed rate) merely pays the buyer the market value of the option of entering into the swap on its exercise date. This is known as the "expiry value," which is determined based on the difference between the pre-determined fixed rate provided for in the swaption contract and the fixed rate available on the open market on the exercise date of the swaption. In order to determine what the market rate is at exercise, the parties to the swaption use the ISDAfix benchmark rate.

- 16. The Defendant Banks are dealers that bought and sold cash-settled swaptions tied to ISDAfix to Plaintiff and the Class. By conspiring to manipulate ISDAfix, the Defendant Banks ensured that, when they were the purchasers of cash-settled swaptions that were "in-the-money," they maximized their profits. Likewise, when the Defendants were the sellers of swaptions, they manipulated ISDAfix to minimize or completely avoid losses. While the swaption market alone was sufficient motivation for this unlawful scheme, the Defendant Banks also reaped supracompetitive profits (and minimized their losses) on other interest rate derivatives.
- 17. While this unlawful conspiracy was carried out for years in secret, without detection, it was ultimately uncovered in early 2013, when it was announced that government regulators were investigating this very conduct by the Defendants. In April 2013, the Commodity Futures Trading Commission ("CFTC") began probing price manipulation by ICAP and interviewing ICAP brokers and employees of the Defendant Banks. In August 2013, based on recorded telephone calls and emails that had been reviewed, the CFTC reportedly concluded that the Defendant Banks had instructed ICAP brokers to facilitate as many interest rate swaps as possible to push ISDAfix to a predetermined level. On September 9, 2014, Bloomberg reported that the CFTC had "told the U.S. Justice Department they've found evidence of criminal behavior following an investigation into banks' alleged manipulation of ISDAfix[.]"¹
- 18. Other regulators, such as the U.K. Financial Conduct Authority and Germany's financial regulator, BaFin, have also launched probes.

Matthew Leising and Tom Schoenberg, *CFTC Said to Alert Justice Department of Criminal Rate Rigging*, BLOOMBERG (Sept. 9, 2014), http://www.bloomberg.com/news/2014-09-08/cftc-said-to-alert-justice-department-of-criminal-rate-rigging.html.

- 19. These probes have not only turned up evidence of Defendants' wrongdoing, but they have also prompted Defendants to take further actions evidencing their consciousness of guilt. Specifically, as government regulators have uncovered Defendants' conspiracy, numerous banks have ceased their involvement in setting ISDAfix. As of September 2013, Defendants Goldman Sachs & Co., HSBC Bank plc, Nomura Securities International, Inc., Royal Bank of Scotland plc, and Wells Fargo Bank, N.A. had all abandoned the process. In January 2014, in fact, because of ICAP's involvement in this conspiracy, ISDA removed ICAP from its role as the administrator of the USD ISDAfix rates.
- 20. The United Kingdom is also moving, in reaction to the rate-fixing scandals, to criminalize any manipulation of benchmark rates, including ISDAfix.²
- 21. As evidence of Defendants' wrongdoing has emerged, the trends in their submission activity have also, not surprisingly, changed. While, from at least 2009 to late 2012 and early 2013, the overwhelming majority of ISDAfix quote submissions were identical, as soon as news of potential investigations became known to Defendants, the submissions began to disperse, most notably when the December 2012 UBS settlement on LIBOR revealed brokers' involvement in the LIBOR conspiracy for the first time. When the CFTC's ISDAfix investigation became public in early 2013, the submissions further dispersed. Just as there was no legitimate economic explanation for the uniformity of these submissions prior to the discovery of Defendants' conspiracy, there is no explanation for their dispersion after early 2013 other than an abandonment of the prior conspiracy in reaction to government scrutiny and a

Julia Sun, *UK to Criminalize Manipulation of Seven Benchmark Rates Before Election*, THE STREET (Sept. 25, 2014), http://www.thestreet.com/video/12892447/uk-to-criminalize-manipulation-of-seven-benchmark-rates-before-election.html.

shared realization that identical submissions across all contributing banks was not what should have happened for so many years.

22. Nonetheless, while Defendants are being investigated by government regulators and ICAP has been removed from its post, Plaintiff and the Class have not had their injuries redressed. Those injuries, which were felt on almost all interest rate derivatives transactions that referenced ISDAfix, are likely in the billions of dollars class-wide.

JURISDICTION AND VENUE

- 23. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§1331 and 1337(a), and pursuant to §§4 and 16 of the Clayton Act, 15 U.S.C. §§15(a) and 26, and §22 of the Commodity Exchange Act, 7 U.S.C. §25.
- 24. Venue is proper in this District pursuant to §§4, 12 and 16 of the Clayton Act, 15 U.S.C. §§15(a), 22 and 26, and 28 U.S.C. §1391(b), (c) and (d). One or more of the Defendants resided, transacted business, were found, or had agents in this District, a substantial part of the events giving rise to Plaintiff's claims arose in the District, and a substantial portion of the affected interstate trade and commerce described herein has been carried out in this District.
- 25. Each Defendant is subject to personal jurisdiction because each transacted business throughout the United States, including in this District, including by transacting in interest rate swaps and other derivatives settled on the basis of ISDAfix with Class members throughout the United States and in this District. In addition, Defendants' activities, and those of their co-conspirators, were within the flow of, were intended to, and had a substantial effect on foreign and interstate commerce.

THE PARTIES

Plaintiff

26. Plaintiff the County of Beaver ("Beaver County"), a Fourth Class County under the laws of the Commonwealth of Pennsylvania, transacted with one or more Defendant Banks in interest rate derivatives that were tied to or directly affected by ISDAfix and, as a result, was injured by Defendants' anticompetitive conduct.

Defendants

- 27. Whenever reference is made in this Complaint to any act, deed, or transaction of any entity, the allegation means that the corporation engaged in the act, deed, or transaction by or through its officers, directors, agents, employees, or representatives while they were actively engaged in the management, direction, control, or transaction of the entity's business or affairs.
- 28. Defendant Bank of America Corporation is a Delaware corporation, with its principal place of business in Charlotte, North Carolina, and with branch locations in New York, New York. As used herein, "Bank of America" includes Defendant Bank of America Corporation and its subsidiaries and affiliates, including Bank of America N.A. During the Class Period, Bank of America was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 29. Defendant Barclays Bank PLC is a British public limited company, with its principal place of business in London, England, and with branch locations in New York, New York. As used herein, "Barclays" includes Defendant Barclays Bank PLC and its subsidiaries and affiliates. During the Class Period, Barclays was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.

- 30. Defendant BNP Paribas SA is a company organized and existing under the laws of France, with its principal place of business in Paris, France, and with branch locations in New York, New York. As used herein, "BNP" includes Defendant BNP Paribas SA and its subsidiaries and affiliates. During the Class Period, BNP was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 31. Defendant Citigroup, Inc. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. As used herein, "Citigroup" includes Defendant Citigroup, Inc. and its subsidiaries and affiliates, including Citibank N.A. During the Class Period, Citigroup was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 32. Defendant Credit Suisse AG, New York Branch is a corporation based in New York, New York that operates as a subsidiary of Credit Suisse AG. As used herein, "Credit Suisse" includes Defendant Credit Suisse AG, New York Branch and its subsidiaries and affiliates. During the Class Period, Credit Suisse was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 33. Defendant Deutsche Bank AG is a corporation organized and existing under the laws of Germany, with its principal place of business in Frankfurt, Germany, and branch locations in New York, New York. As used herein, "Deutsche Bank" includes Defendant Deutsche Bank AG and its subsidiaries and affiliates. During the Class Period, Deutsche Bank was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.

- 34. Defendant Goldman Sachs Group, Inc. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. As used herein, "Goldman Sachs" includes Defendant Goldman Sachs Group, Inc. and its subsidiaries and affiliates, including Goldman Sachs & Co. Throughout the majority of the Class Period and until approximately June 2012, Goldman Sachs was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 35. Defendant HSBC Bank plc is a company organized and existing under the laws of the United Kingdom, with its principal place of business in London, England, and branch locations in New York, New York. As used herein, "HSBC" includes Defendant HSBC Bank plc and its subsidiaries and affiliates, including HSBC Bank USA, N.A. Throughout the majority of the Class Period and until approximately January 2013, HSBC was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 36. Defendant JPMorgan Chase & Co. is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in New York, New York. As used herein, "JPMorgan" includes Defendant JPMorgan Chase & Co. and its subsidiaries and affiliates, including JPMorgan Chase Bank N.A. During the Class Period, JPMorgan was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 37. Defendant Nomura Securities International, Inc. is a corporation organized and existing under the laws of New York, with its principal place of business in New York, New York, and a wholly owned subsidiary of Nomura Holdings America, Inc., which is a wholly

owned subsidiary of Nomura Holdings, Inc. As used herein, "Nomura" includes Defendant Nomura Securities International, Inc. and its subsidiaries and affiliates. Throughout the majority of the Class Period and until approximately October 2013, Nomura was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.

- 38. Defendant Royal Bank of Scotland plc is a corporation organized and existing under the laws of the United Kingdom, with its principal place of business in Edinburgh, Scotland, and branch locations in New York, New York. As used herein, "RBS" includes Defendant Royal Bank of Scotland plc and its subsidiaries and affiliates. Throughout the majority of the Class Period and until approximately September 2013, RBS was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 39. Defendant UBS AG is a corporation organized and existing under the laws of Switzerland, with its principal places of business in Basel and Zurich, Switzerland, and regional offices in New York, New York, and Stamford, Connecticut. As used herein, "UBS" includes Defendant UBS AG and its subsidiaries and affiliates. During the Class Period, UBS was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.
- 40. Defendant Wells Fargo Bank, N.A., is a corporation organized and existing under the laws of the State of Delaware, and operates as a subsidiary of Wells Fargo & Co. As used herein, "Wells Fargo" or "Wachovia" includes Wells Fargo & Co. and its subsidiaries and affiliates, including Wachovia Bank, N.A. and its successor by merger Wells Fargo Bank N.A. Throughout the majority of the Class Period and until approximately September 2013, Wells

Fargo was involved in and contributed to the setting of the ISDAfix rate, and transacted in interest rate derivatives with members of the Class.

- 41. Bank of America, Barclays, BNP, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan, Nomura, RBS, UBS and Wells Fargo are referred to collectively herein as the "Defendant Banks."
- 42. Defendant ICAP plc is a company organized and existing under English law, with its principal place of business in London, England, and a branch location in Jersey City, New Jersey. As used herein, "ICAP" includes Defendant ICAP plc and its subsidiaries and affiliates. During the Class Period and until January 26, 2014, ICAP served as the administrator for the setting of the USD ISDAfix rate and as a broker for billions, if not trillions, of dollars of interest rate derivative transactions.
- 43. Various other non-parties also participated as co-conspirators, performed acts, and made statements in furtherance of the conspiracy. Plaintiff reserves the right to identify other co-conspirators and to name subsequently some or all co-conspirators, whether identified here or not, as defendants.
- 44. Defendants are jointly and severally liable for the acts of their co-conspirators whether named or not named as Defendants in this complaint. Each Defendant acted as the agent or co-conspirator of or for the other Defendants with respect to the acts, violations, and common course of conduct alleged herein.

FACTUAL ALLEGATIONS

A. <u>Interest Rate Derivatives</u>

45. A derivative is a financial instrument, the value of which depends on the value of some other underlying asset, such as a stock, bond, or commodity. Derivatives permit market

participants to manage and transfer risk by allowing them to separate out and trade individual risk components, such as interest rate risk.

- 46. The largest derivatives market in the world is the interest rate derivatives market. The most "vanilla" type of interest rate derivative is the interest rate swap, which is a transaction in which the parties exchange interest rate payments on an agreed notional amount for a fixed period of time. Typically, one party will pay based on a "fixed" interest rate on the notional amount that does not vary from one payment to the next, while the other party will pay based on a variable "floating" interest rate that is tied to an independent benchmark such as the London Interbank Offered Rate ("LIBOR").³
- 47. Over the past three decades, interest rate derivatives and, specifically, interest rate swaps have proliferated. ISDA, a trade association for over-the-counter derivatives markets, estimates that the collective notional amounts on interest rate swaps was approximately \$2.3 trillion in 1990. By 2009, that figure had grown to over \$450 trillion. As of June 2012, according to the Bank of International Settlements, the notional amounts outstanding were \$494 trillion for over-the-counter interest rate transactions and \$342 trillion for over-the-counter interest rate swaps.
- 48. As the market for interest rate derivatives has grown, so too has the number and type of interest rate derivatives. One of the most common interest rate derivatives is the swaption. A swaption is a contract wherein the buyer of the swaption pays the seller a premium

LIBOR is a benchmark interest rate. It is supposed to represent the average interest rate, estimated by leading banks, that one bank would be charged when borrowing from another bank. Much like ISDAfix, LIBOR is important for determining the value of a wide variety of derivatives. Several Defendants – most notably Barclays, RBS, UBS and ICAP – were found by American and British regulatory agencies to have engaged in manipulation of LIBOR. The investigation into other participants in the LIBOR scandal, including other Defendant Banks, is ongoing.

for the option, but not the obligation, to enter an interest rate swap contract with the seller on a specified date. The swaption spells out all of the terms of the underlying potential swap, including the length of the swap, the notional amount, the rates for each party, the dates on which payments are due (the "settlement dates"), and how often such payments are due (the "settlement periods"), as well as the premium the buyer of the swaption must pay and when the option may be exercised. If the buyer of the swaption is the party expected to pay the fixed interest rate, it is known as a payer swaption. If, however, the buyer of the swaption is the party expected to receive the fixed interest rate, it is known as a receiver swaption.

- 49. When entering a swaption, the parties may choose whether the swaption is to be *physically settled* or *cash settled*. A physically settled swaption, if exercised, results in the parties entering into the underlying swap. If the parties decide that the swaption is to be cash-settled instead, on the exercise date, if the buyer is "in-the-money," the seller simply pays the buyer the difference in value between the underlying swap transaction and an equivalent swap transaction available on the open market on the exercise date.
- 50. At exercise, a cash-settled swaption is either "in-the-money" or "out-of-the-money." A cash-settled swaption is most commonly valued by comparing the fixed rate in the swaption's underlying swap transaction to the fixed rate available on the market for an equivalent swap. The most common benchmark for performing this calculation is ISDAfix. Indeed, ISDAfix is the benchmark nominated to be the default rate by ISDA in the 2006 ISDA Definitions, which provide defined terms for documenting interest rate and currency derivatives transactions. Thus, on the exercise date, the parties to a swaption compare the swaption's fixed rate to the comparable ISDAfix rate on that date to determine whether the swaption is in-the-money, and, if it is, how much it is worth.

- 51. A payer swaption is in-the-money if the fixed rate available in the market is higher than the swaption's fixed rate, because the buyer of that swaption would be paying less than the market rate. A receiver swaption is in-the-money if the fixed rate available in the market is lower than the swaption's fixed rate, because the buyer of that swaption would be receiving more than the market rate.
- 52. If the swaption is in-the-money, then the swaption's value will increase the further the swaption's fixed rate is from the ISDAfix rate. Therefore, accurate calculation and reporting of the ISDAfix rate is critical to the fair settlement of swaptions, and even the smallest move of ISDAfix can drastically affect the value of a cash-settled swaption.
- 53. While a manipulation of ISDAfix rates would directly impact cash-settled swaptions, such manipulation also affects physically settled swaptions. Because ISDAfix rates are supposed to represent the swap rates available on the market, they can affect a swaption holder's decision to exercise the swaption. A physically settled swaption holder will choose to exercise the swaption if the fixed interest rate specified in the transaction underlying the swaption is more favorable than fixed rates available in the market on the exercise date. But if ISDAfix rates have been manipulated, swaption holders do not have an accurate assessment of the market. They may unwittingly decide incorrectly to either exercise or not exercise the swaption, causing substantial financial harm.
- 54. In addition to interest rate swaps and swaptions, there are many other financial instruments that use or make reference to the ISDAfix benchmark rate, including swapnote futures, cash-settled swap futures, constant maturity swaps, "steepeners," "inverse floaters," and "snowballs," among others. The U.S. Federal Reserve uses ISDAfix as the source for USD swap rates in its Statistical Release H.15, and banks use ISDAfix rates to value their own portfolios,

which are then incorporated into the banks' reported financial results. ISDAfix rates may also be used to price commercial real estate mortgages and various types of structured bonds and notes. Finally, both the Chicago Mercantile Exchange and the Chicago Board of Trade use ISDAfix as the settlement price in their swap futures contracts.

- 55. During the Class Period, as defined below, all of these interest rate derivatives and other financial instruments were transacted in the over-the-counter market, meaning that there was no centralized and regulated exchange. In the over-the-counter market, inter-dealer brokers such as Defendant ICAP exist to provide liquidity to the market, facilitate information flow by providing a centralized hub for bids and offers, and to improve market efficiency by rapid matching of buyers and sellers. Inter-dealer brokers are well compensated by receiving a commission on the deals they create through matching a buyer and a seller.
- 56. In selecting an inter-dealer broker to facilitate interest rate derivative transactions, market participants have few options. In the over-the-counter interest rate derivatives market, four inter-dealer brokers are responsible for 83.6% of all activity in the market, with ICAP having the largest share of the market at 29.4%. The interest rate derivatives market is highly active and profitable for inter-dealer brokers like ICAP. At the end of 2012, there were \$370 trillion of rate swaps outstanding, and ICAP brokered \$1.4 trillion of those transactions every day.
- 57. During the Class Period, ICAP also controlled an electronic screen service known as 19901. Screen 19901 publicized the bid/offer rates of all swap transactions of the specified terms executed through ICAP, and was subscribed to by around 6,000 companies, financial firms, and other market participants who relied upon its data to value interest rate swaps, swaptions, and other financial products. Such screens are critical for the companies that monitor

them, and can make or break profit and loss. Screen 19901 was updated periodically throughout the day by ICAP as trades were executed.

B. ISDAfix

- 58. As described above, ISDAfix is a key benchmark rate for a broad range of interest rate derivatives and other financial instruments. The ISDAfix rate is supposed to represent the average fixed interest rate that an over-the-counter derivatives market dealer would quote for a swap of a certain duration and currency in exchange for a specified floating LIBOR rate (*e.g.*, 3-month LIBOR).
- 59. ISDA established ISDAfix in 1998 to serve as a benchmark of fixed swap rates. ISDAfix was intended to be a benchmark for average swap rates on a daily basis, and was developed "to facilitate the determination of exercise values for cash-settled swap options." ISDAfix "provides a transparent, readily available value and settlement rate." Without ISDAfix, an over-the-counter derivatives market participant would have to call multiple other market participants to value a swaption. This is because the over-the-counter derivatives market did not have a centralized exchange where market prices were readily available. Thus, ISDAfix was often the only available reference for parties looking to settle interest rate options, cancel swaps contracts, and value other financial instruments. Indeed, the 2006 ISDA Definitions establish ISDAfix as a default benchmark for calculating the value of a cash-settled swaption.
 - 60. According to ISDA's definition of ISDAfix, each ISDAfix rate should represent:
 - [A] rate which is the mean of where that dealer would itself offer and bid a swap in the relevant maturity for a notional equivalent amount of US \$50 million or whatever amount is deemed market size in that currency for that tenor to an acknowledged dealer of good credit in the swap market. The rate should not be

Intercontinental Exchange, *ISDAFIX*, https://www.theice.com/iba/isdafix#contributors-users (last visited Sept. 29, 2014).

⁵ *Id*.

where the dealer sees mid-market away from itself, but should be a function of its own bid/offer spread.⁶

- 61. There are multiple varieties of ISDAfix rates for transactions of varying length in different currencies. While some ISDAfix rates are no longer currently reported, there have been rates published for the Euro, British Pound Sterling, the Hong Kong Dollar, Japanese Yen, the Swiss Franc, and the U.S. Dollar. The length or terms of swaps with an ISDAfix rate range from one-year swaps to 30-year swaps. All ISDAfix rates are expressed as a percentage to three decimal places, such as 3.202%. These rates are then distributed to market participants who subscribe to five electronic screen services operated by Reuters, called ISDAFIX 1 ISDAFIX 5. These screens are subscribed to by thousands of market participants and display that day's ISDAfix rates; for example, ISDAFIX 3 displays the USD swap rates as well as USD swap spreads while ISDAFIX 4 displays the rates for swaps in British Pound Sterling and Swiss Francs. An ISDAfix rate is calculated either once or twice a day, depending on the currency.
- 62. During the Class Period, there were two parties responsible for administration of the ISDAfix benchmark fixing process: Defendant ICAP, which calculated all USD rates, and Thomson Reuters, which was responsible for all other rates.⁷
- 63. The ISDAfix rate was based on contributions submitted to ICAP or Reuters by banks during a 15-minute "polling window" in which the rate is calculated. During the Class Period, the Defendant Banks were the contributing banks for USD ISDAfix rates.
- 64. The polling window opened at 11:00 a.m. Eastern time for USD rates. The polling window for swaps of a specified term started with ICAP indicating, through the website,

ISDA, ISDA Response to the European Commission's Public Consultation on the Regulation of Indices 7 (Nov. 29, 2012), http://www2.isda.org/news/isda-response-to-the-european-commissions-public-consultation-on-the-regulation-of-indices.

Earlier this year, ISDA stripped ICAP of its ISDAfix duties, most likely in reaction to the investigation and allegations regarding ICAP and Defendant Banks' rigging of the ISDAfix rate.

a reference-point swap spread and swap rate generated from recent swaps of that term completed through ICAP and executable bids and offers for swaps of that term submitted to ICAP, which ICAP brokers inputted manually onto the 19901 Screen.⁸ Contributors could then privately submit their rates or accept ICAP's reference rates.

- 65. Contributing banks were asked to submit rates to ICAP for the full set of designated maturities for swaps of the given ISDAfix currency within the polling window. Contributors could update or amend their submissions at any time during this polling window. Quotes were submitted through a private, secure website.
- 66. At the end of the window, ICAP reviewed the submissions and published a calculated rate. ICAP calculated this rate by eliminating certain of the highest and lowest submissions ("topping and tailing") and then averaging the remaining quotes (assuming enough quotes were received). This generated that day's USD ISDAfix rates, which were then published on ISDAFIX screen 3.

C. Government Investigations into the LIBOR Scandal Reveal the Extent of Collusion Between Defendants in Manipulating Financial Benchmarks

67. The government investigations into possible manipulation of ISDAfix resulted, in part, from cooperation agreements reached in the earlier investigation of the LIBOR scandal. Following articles exposing the LIBOR scandal, regulatory agencies began to investigate whether the banks responsible for the LIBOR benchmark had colluded to illicitly profit. The

According to ISDA, ICAP would generate the reference point using (1) the "most recent swap spreads from completed trades and executable bids and offers in market size done/posted at ICAP" and displayed on Reuters page or screen 19901 at 11:00 AM, and (2) "executed trades and executable bids and offers at 11 a.m. for US Treasury securities from ICAP's BrokerTec US Treasury electronic trading platform." Steven Hatzakis, *ISDA Chooses Thomson Reuters to Calculate USD IR Swaps Benchmark*, *Drops ICAP*, FOREX MAGNATES, (Jan. 27, 2014), http://forexmagnates.com/isda-chooses-thomson-reuters-to-calculate-usd-ir-swaps-benchmark-ends-icap-agreement/.

government investigations resulted in both criminal and regulatory charges, and were coordinated between agencies from the United States, the United Kingdom, Canada, Japan, and Europe.

- 68. While they are still ongoing, the LIBOR investigations have already turned up emails and other evidence proving that certain of the Defendants and others colluded to provide false rate quotes to drive the LIBOR benchmark in whichever direction would profit them the most. This evidence showed that swap traders at a Defendant Bank would tell their colleagues in charge of sending the rate quote which quote would make the Defendant Bank the most money that day. This paper trail, along with other evidence, led to enormous fines and settlements for Defendants Barclays and UBS.
- 69. On December 19, 2012, the scandal widened when, for the first time, it was revealed that LIBOR manipulation was not restricted to co-workers at Defendant Banks, but involved third-party dealers and brokers. This revelation occurred in connection with UBS's settlement agreement, wherein UBS agreed to pay fines three times that of Barclays for its role in fixing the LIBOR rate.
- 70. UBS's settlement "exposed the systemic problems with the rate-setting process." According to Tracey McDermott, the enforcement director for the U.K. Financial Services Authority ("FSA"), UBS ignored "[t]he integrity of benchmarks [which] are of fundamental importance to . . . international financial markets." The UBS settlement exposed the illicit profit certain Defendants had gained, and prompted criminal investigations and arrests. Banks

Mark Scott and Ben Protess, *As Unit Pleads Guilty, UBS Pays \$1.5 Billion Over Rate Rigging*, N.Y. TIMES DEALBOOK (Dec. 19, 2012), http://dealbook.nytimes.com/2012/12/19/as-unit-pleads-guilty-ubs-pays-1-5-billion-in-fines-over-rate-rigging/?_php=true&_type=blogs&_r=0.

¹⁰ *Id*.

had previously expected to face fines, almost as a cost of doing business, but now the U.S. Department of Justice had extracted a guilty plea by UBS's Japanese subsidiary to wire fraud, and indicted some of the bank's senior traders.

- 71. Defendant ICAP was at the center of the LIBOR scandal, and was forced to settle the investigations for \$87 million. The investigations found that ICAP "knowingly disseminated false and misleading information concerning Yen borrowing rates to market participants in attempts to manipulate, at times successfully, the official fixing of the daily Yen LIBOR." ICAP and its clients, most noticeably UBS, worked together to hide their collusion from the rest of the market.
- 72. Following UBS's settlement agreement, updates about the breadth of ongoing investigations continued throughout 2013. With each report, the scope of the benchmark-setting corruption investigations became broader. Having seen the banks' corruption with one key financial measurement, regulators were not content to presume they were trustworthy with respect to others. For instance, regulatory agencies have explicitly stated that their investigation into ICAP's wrongdoing is not limited to its manipulation of Yen LIBOR, with Mythili Raman, head of the Justice Department's criminal division, stating "We're not done." 12
- 73. Indeed, by the time ICAP settled the investigation into its role in manipulating Yen LIBOR, the CFTC had already turned its attention to ISDAfix. The U.K. Financial Conduct Authority has given its ISDAfix investigation "formal status," signifying that it is conducting its own full investigation rather than merely assisting the CFTC. The investigation into ISDAfix is

CFTC, CFTC Charges ICAP Europe Limited, a Subsidiary of ICAP plc, with Manipulation and Attempted Manipulation of Yen Libor (Sept. 25, 2013), http://www.cftc.gov/PressRoom/PressReleases/pr6708-13.

David Enrich, Jean Eaglesham, and Devlin Barrett, *ICAP Is Fined \$87 Million in Libor Scandal*, WALL STREET JOURNAL (Sept. 25, 2013), http://online.wsj.com/news/articles/SB10001424052702303342104579096942161083458.

turning up the same evidence as LIBOR: emails, telephone records, and other evidence showing bank traders and brokers working together with the express goal of moving the ISDAfix rate in order to profit from their derivatives positions. In fact, many of the Defendants who signed settlement agreements over their role in LIBOR are required to cooperate with the investigations into ISDAfix as part of that settlement, and face criminal prosecution if they withhold any evidence.

- 74. In April 2013, the CFTC issued its first round of ISDAfix-related subpoenas. The CFTC is said to be sifting through millions of emails, as it simultaneously interviews current and former employees of banks, dealers, and ICAP as part of its ISDAfix investigation. In recent regulatory reports, ICAP confirmed that "the US CFTC has requested information in relation to [ICAP's] role in the setting of the US dollar segment of a benchmark known as ISDAFIX which could also result in a formal investigation, claims or penalties as well as incurring further legal costs." UBS, RBS, Barclays, and Citibank have all similarly admitted in their recent regulatory filings to being subject to ISDAfix investigations, including having "ongoing obligations" to cooperate with such investigations.
- 75. On September 9, 2014, Bloomberg reported that the CFTC had "told the U.S. Justice Department they've found evidence of criminal behavior following an investigation into banks' alleged manipulation of ISDAfix[.]" The article stated that the CFTC "which first sent subpoenas to the world's largest banks in November 2012 to determine whether ISDAfix was

ICAP Group Holdings plc, *Issue of EUR 350,000,000 3.125 per cent. Notes due March 2019 under the £1,000,000,000 Global Medium Term Note Programme* (Mar. 4, 2014), *available at* http://www.icap.com/~/media/Files/I/Icap-Corp/pdfs/002%20Final%20Terms.pdf.

Matthew Leising and Tom Schoenberg, *CFTC Said to Alert Justice Department of Criminal Rate Rigging*, BLOOMBERG (Sept. 9, 2014), http://www.bloomberg.com/news/2014-09-08/cftc-said-to-alert-justice-department-of-criminal-rate-rigging.html.

rigged, has flagged its findings to prosecutors, according to a person familiar with the matter.

The CFTC's enforcement powers are confined to bringing civil, not criminal, cases."

76. It is now standard for instruments that use ISDAfix as a benchmark to include a warning notifying investors of the investigation into the ISDAfix manipulation. ISDAfix is shaping up to be the equivalent of the LIBOR scandal, if not larger.

D. Defendants Conspired to Manipulate ISDAfix

- Throughout the Class Period, the Defendant Banks conspired to manipulate the ISDAfix benchmark rate so as to extract supracompetitive profits on interest rate derivative transactions, all at their customers' expense. This conspiracy to manipulate the ISDAfix rate was effectuated through collusion among the Defendant Banks and Defendant ICAP. As a result of these agreements, Defendants carried out their manipulation of the ISDAfix rate in several ways, as summarized in the introduction above and expanded upon below.
- 78. The facts of this collusion have been confirmed not only by Plaintiff's investigation, but also by government regulators such as the CFTC, the press, economic analyses commissioned by Plaintiff, and even the conduct of Defendants themselves after their conspiracy was uncovered. But while Defendants' conspiracy is now evident, the Class remains injured to the tune of billions of dollars as a direct result of Defendants' conspiracy to manipulate ISDAfix.

1. Defendants Conspired to Submit Identical Off-Market Rate Quotes to ICAP

79. The first thing Defendants did was to agree in advance to submit identical rate quotes to ICAP. After the ISDAfix "reference point" was set by ICAP, ISDAfix contributors submitted rate quotes to ICAP. A quote was supposed to be the rate which is a mean of where a dealer would itself offer and bid a swap in the relevant currency and of the relevant maturity. In

reality, however, the Defendant Banks gamed this process by agreeing to submit not their real rate quotes, but the same reference rate reported by ICAP – in effect, fixing prices. From at least 2009 to December 2012, the ISDAfix reporting banks regularly submitted the same or virtually the same USD ISDAfix rate quotes, all of which matched the initial reference rate posted by ICAP.

- 80. This could not have happened without some form of advanced coordination. ISDAfix rate quote submissions go to five decimal points to a thousandth of a basis point. Even if reporting banks always responded similarly to market conditions, the odds against contributors unilaterally submitting the exact same quotes down to the thousandth of a basis point are astronomical. Yet, this happened *almost every single day* between at least 2009 and December 2012.
- 81. When one or more of the Defendant Banks needed an ISDAfix rate to be set at a certain level to benefit their derivatives portfolios, they would communicate with other Defendant Banks via phone, email, and online chat rooms. Based on these communications, Defendant Banks agreed to submit identical swap rate quotes to ICAP. Currently, the CFTC is reviewing phone recordings and over one million emails linked to this conspiracy.
- 82. Dispersion refers to the extent to which each ISDAfix quote submission varies from every other ISDAfix quote submission. Plaintiff's experts compared the level of dispersion in ISDAfix quote submissions to the level of dispersion found in financial benchmarks that use similar quote systems. They computed the average difference between the highest and lowest rate submissions for a variety of such benchmarks.
- 83. Quote submissions for analogous benchmarks did not come close to showing ISDAfix's level of uniformity. The only exception was a period of approximately one year from

August 2006 through August 2007 in which LIBOR quotes were completely equal to each other day in and day out for almost virtually all of the contributing banks. Such a pattern is extremely unlikely to occur without some level of explicit coordination. Indeed, we know LIBOR was manipulated, and the pattern there in 2006-2007 is consistent with similar behavior in ISDAfix.

- 84. Aside from LIBOR, the comparable benchmark with the least dispersion among its submissions the ISDAfix rate in British pounds showed six times more dispersion than the USD ISDAfix submissions. Benchmarks for government bonds showed between 23 and 37 times more dispersion than USD ISDAfix. These findings point powerfully to the conclusion that the USD ISDAfix panel banks were coordinating their ISDAfix submissions. The uniformity seen in ISDAfix could not have been achieved without collusion.
- 85. The charts below demonstrate this stark contrast. First, comparing USD ISDAfix submissions to ISDAfix submissions in other currencies yields startling results. Note that while, for the entirety of the Class Period, ICAP administered the USD ISDAfix rates, Reuters administered the ISDAfix rates for other currencies.

Instrument	Dispersion (basis points)	Ratio to USD ISDAfix
30-year USD ISDAfix submissions	0.12	N/A
30-year GBP ISDAfix submissions	0.7	6x
30-year EUR ISDAfix submissions	1.0	8x

86. The above chart demonstrates that the level of dispersion seen in GBP (British Pound) and EUR (Euro) ISDAfix submissions is respectively six and eight times higher than

USD ISDAfix submissions of the same duration. ¹⁵ A key difference is that ICAP, unlike Reuters, functions as both the ISDAfix administrator and as an inter-dealer broker. Because of ICAP's commission structure, its brokers have a strong incentive to assist in manipulating ISDAfix rates. Where that incentive does not exist, we see substantially greater levels of dispersion.

87. There are even more dramatic results when comparing USD ISDAfix to other, similar non-ISDAfix benchmarks.

Instrument	Dispersion (basis points)	Ratio to USD ISDAfix
30-year USD ISDAfix submissions	0.12	N/A
USD interest rate swaps	0.7	6x
10-year German Bunds	1.4	12x
10-year US Treasury Bonds	2.7	23x
10-year Italian BTPs	4.4	37x

88. The above chart demonstrates that other benchmarks feature levels of dispersion ¹⁶ far higher than USD ISDAfix, with two such benchmarks showing dispersion levels 23 and 37 times higher. The comparable benchmark with the next lowest level of dispersion still shows dispersion levels six times higher than USD ISDAfix.

The data within this table is based on ISDAfix submissions by dealer banks across a selected sample of days through mid-2013. In the case of USD submissions, the average result across the sample also corresponds to the average dispersion taken across all submissions from 2009 through mid-2013.

The data within this table is based on end of day quotes from dealer banks from the end of 2010 until mid-2014 for USD interest rate swap quotes; from the beginning of 2014 until mid-2014 for US Treasury Bonds and German Bunds; and from mid-2013 until mid-2014 for Italian BTPs. All data is from Bloomberg sources.

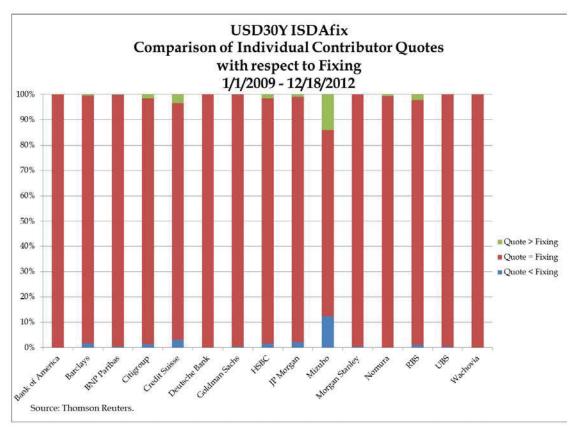
- 89. But all this changed starting in late 2012, with the announcement of the UBS settlement and the subsequent announcements throughout 2013 of investigations into other benchmarks, such as the WM/Reuters foreign exchange fix, London gold fix, and even ISDAfix itself. As these disclosures became public, Defendants' ISDAfix conspiracy began to unravel.
- 90. Indeed, throughout 2013, Defendant Banks' USD ISDAfix quote submissions became increasingly dispersed. For at least three years prior to December 2012, the Defendant Banks had submitted identical ISDAfix quotes virtually every day. By the end of 2013, however, less than half of the quotes submitted to ICAP were identical to the ISDAfix reference rate for a given day. These changes in behavior of the ISDAfix panel banks are not explainable by any market events or market forces. They were purely efforts by the Defendants to stop submitting identical quotes in the hope of heading off further regulatory scrutiny of their conspiracy.

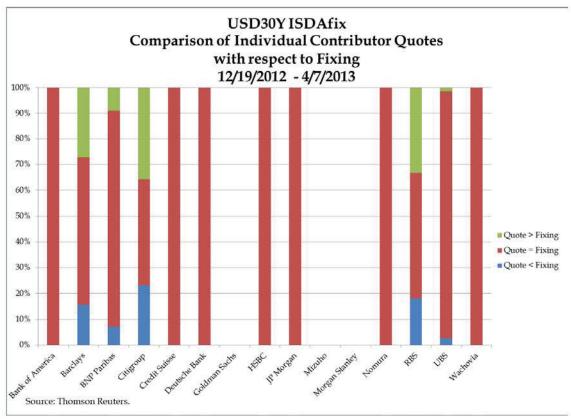
Average Percentage of Daily Contributor Quotes That Are Identical to ISDAfix							
Tenor	Period 1 (1/2/2009 - 12/18/2012)	Period 2 (12/19/2012 - 4/7/2013)	Period 3 (4/8/2013 - 8/1/2013)	Period 4 (8/2/2013 - 12/31/2013)			
USD1Y	94.23%	67.72%	55.65%	43.00%			
USD2Y	94.88%	61.99%	48.97%	38.68%			
USD3Y	94.71%	58.41%	50.01%	39.06%			
USD4Y	93.72%	58.14%	45.69%	34.77%			
USD5Y	95.27%	81.88%	76.31%	56.76%			
USD6Y	95.73%	54.80%	36.44%	29.02%			
USD7Y	94.74%	56.55%	45.41%	32.87%			
USD8Y	95.43%	43.75%	39.15%	31.23%			
USD9Y	94.95%	48.13%	37.39%	32.22%			
USD10Y	93.57%	78.66%	72.93%	50.01%			
USD15Y	95.29%	50.22%	40.83%	32.03%			
USD20Y	95.75%	50.41%	42.93%	26.91%			
USD30Y	95.95%	85.04%	72.72%	59.46%			
Source: Thon	nson Reuters, Bloomberg.						

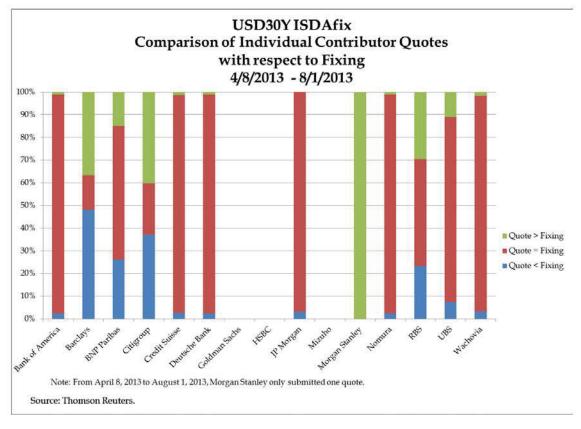
91. The above chart shows the average percentage of USD ISDAfix quote submissions for various durations that were identical to the ISDAfix reference rate for the day

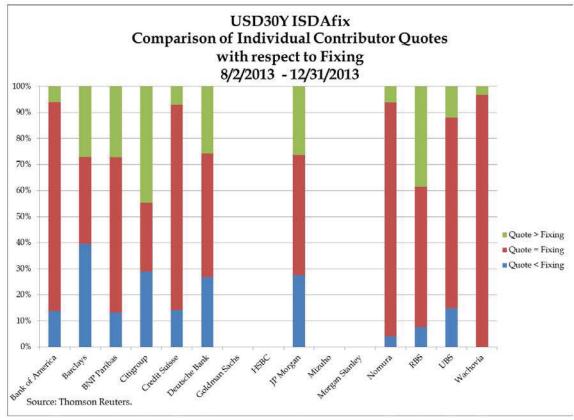
they were submitted. In Period 1 (from January 2, 2009 to December 18, 2012), well over 90% of ISDAfix quote submissions were identical to both the reference rate submitted by ICAP and the published ISDAfix rate for that day. In all subsequent periods, measuring the extent to which ISDAfix submissions matched the ISDAfix rate after December 19, 2012 (when the UBS LIBOR settlement became public), one sees a massive drop in the level of submissions identical to the ISDAfix rate.

- 92. For example, in the USD6Y tenor, in Period 1, 95.73% of ISDAfix submissions were identical to the published ISDAfix rate. In the same tenor in Period 4, *only 29.02%* of submissions were identical to the ISDAfix rate. The above chart shows a dramatic shift from largely identical submissions to increasingly diverse submissions following the revelation of the role of brokers in the LIBOR scandal and related regulatory investigations.
- 93. This practice ran across virtually every ISDAfix contributor. The following charts demonstrate the percentage of individual Defendant Banks' ISDAfix submissions that were identical to the ISDAfix rate for several different time periods.



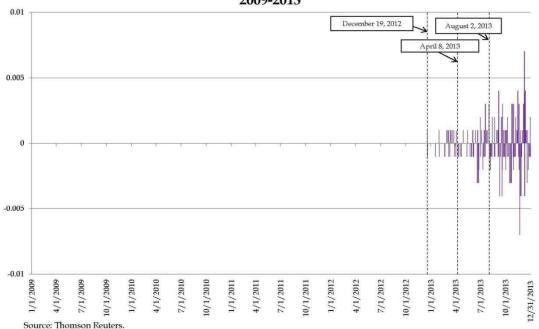






- 94. In the above charts, red represents the percentage of the time a Defendant Bank's ISDAfix submission was identical to the ISDAfix rate. Blue reflects the percentage of the time the ISDAfix rate was greater than the bank's quote, while green represents the percentage of the time that the ISDAfix rate was lower than the bank's quote. Note that 15 rate quotes cannot be identical to the ISDAfix rate without also being identical to each other.
- 95. The first chart demonstrates that all Defendant Banks submitted identical quotes to ICAP well over 90% of the time prior to December 19, 2012. After December 19, 2012, amid news of brokers' role in LIBOR and other benchmark scandals, Defendant Banks' submissions dispersed. For several banks, the percentage of days where their quotes are identical to the eventual ISDAfix rate goes from over 90% to under 50%. Virtually every bank shows a significant change in behavior. The picture that emerges from this study is one of a structural break in the conspiracy where nearly every single ISDAfix contributor withdraws from the conspiracy and begins either to stop submitting altogether or to submit rates that truly reflect its actual swap rates in the marketplace.
- 96. Going one step further and looking at bank-specific data reveals a similar pattern. For every Defendant Bank that continued making ISDAfix submissions, quote patterns show almost no divergence from the ISDAfix rate prior to December 19, 2012, and marked divergence after. The following charts represent Bank of America's and UBS' submission patterns over time in the USD 20Y tenor.

Bank of America
USD20Y Daily Difference Between Bank Submission and ISDAfix
2009-2013



UBS
USD20Y Daily Difference Between Bank Submission and ISDAfix 2009-2013

